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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/731,317 12/06/2000		Normand Nantel	0053.00	1032		
21968	7590	07/30/2003				
NEKTAR 1			EXAMINER			
150 INDUS SAN CARL			PHAM, HOA Q			
				ART UNIT	PAPER NUMBER	
				2877		
				DATE MAILED: 07/30/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application N	o. ()	Applicant(s)							
•		09/731,317	0	NANTEL ET AL.							
_	Office Action Summary	Examiner		Art Unit							
		Hoa Q. Pham		2877							
Th MAILING DATE of this communication appears on the cover sheet with the correspondenc address Period for Reply											
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status											
1)	Responsive to communication(s) filed on	·									
2a) ☐	: - · · - · · · · · · · · · · · · · · ·										
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.											
Dispositi	on of Claims										
•	4)⊠ Claim(s) <u>1-49</u> is/are pending in the application.										
	4a) Of the above claim(s) is/are withdrawn from consideration.										
5)	Claim(s) is/are allowed.										
·	6)⊠ Claim(s) <u>1-49</u> is/are rejected.										
•	Claim(s) is/are objected to.										
8) Claim(s) are subject to restriction and/or election requirement.											
	ion Papers	minas									
9) The specification is objected to by the Examiner.											
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.											
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.											
If approved, corrected drawings are required in reply to this Office action.											
12) The oath or declaration is objected to by the Examiner.											
Priority under 35 U.S.C. §§ 119 and 120											
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).											
a) ☐ All b) ☐ Some * c) ☐ None of:											
1. Certified copies of the priority documents have been received.											
	2. Certified copies of the priority documents have been received in Application No										
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 											
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).											
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.											
Attachment(s)											
2) Notic	ee of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-944) mation Disclosure Statement(s) (PTO-1449) Paper No			y (PTO-413) Paper No Patent Application (P							

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DETAILED ACTION

Specification

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Claims 134 and 145 have been renumbered as claim 14 and 15 and claims 15-48 have been renumbered as 16-49. Thus, claims 1-49 are pending in present application. Applicant should make a note of it.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-7, 12, 14-19,30-33, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson et al (4,147,618) (of record).

Regarding claim 1, 4, 5, 6, 14, 17, 18, 30, 31, 32, and 39, Richardson et al discloses a method and apparatus for measuring product contents comprises a light source (14) for directing light beam onto a substance (8), detector (20) for measuring the emitted light from the substance, and a processor (100) coupled to the detector for

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determining the mass of the substance based on the measured response (see abstract, column 1, lines 5-25, column 2, lines 13-16, column 3, lines 12-24, column 7, lines 20-31 and figure 1).

Regarding claim 2, see abstract for a predetermined portion of the volume of the product.

Regarding claims 3 and 19, see column 1, lines 27-28 for the use of power.

Regarding claims 7 and 33, Richardson et al teaches that the scattered light from the product is detected and converted into electrical signal which representative of the mass of the exposed contents (column 2, lines 33-44).

Regarding claim 15, column 2, lines 64-67 and column 7, lines 32-38, teach that the mass of the contents of a product is within predetermined limits.

Regarding claim 16, see figure 1 of Richardson.

Regarding claim 19, Richardson teaches the use of vacuum source for holding the cartridge which containing powder (column 7, lines 10-40).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 8-11, 13, 20-29, 34-38, and 40-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson et al in view of Pryor et al (GB-2077422), Loy

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(4,461,363), Withnell et al (3,744,582), Hinzpeter (4,640,376) and Annis et al (4,825,454).

Regarding claims 8, 34, and 40, Richardson et al does not explicitly teach that measuring interference pattern cause by emitted light from the substance and correlating the impedance with the associated mass; however, such a feature is known in the art as taught by Pryor (of record). Pryor, from the same field of endeavor, teaches the use of interference pattern for determining the weight of an item (page 2, lines 16-20, page 1, lines 5-8, page 3, lines 7-10 and 50-55). It would have been obvious to one having ordinary skill in the art at the time the invention was made to correlating the interference pattern with an associated mass for the purpose of determining the mass of the substance as suggested by Pryor because both methods are used for the same purpose. A substitution one for another is generally recognized as within the level of ordinary skill in the art.

Regarding claim 9 and 35, Loy (of record) discloses a high-speed capacitive weighing method and apparatus in which the substance is applied by current or voltage and the mass of the substance is determined on the basis of determining the impedance of the substance (abstract and figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the optical inspection system of Richardson et al by a capacitative weight apparatus as taught by Loy because the are function in the same manner.

Regarding claims 10-11 and 36-38, Withnell et al (of record) teaches another method for determining the mass of the substance by applying vibration energy to the

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substance and measuring energy dissipation caused by the substance (figure 1 and abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the energy source of Richardson et al by a vibration energy taught by Withnell because the are function in the same manner.

Regarding claims 21-27, 41, and 46-47, Hinzpeter (of record) teaches that it is well known in the art to provide a calibration step prior to the step of measuring (column 3, lines 7-16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include in Richardson et al addition step of calibration as taught by Hinzpeter. The rationale fort this modification would have arisen from the fact that by including additional step of calibration would improve the accuracy of the measurement.

Regarding claim 13, Annis et al, from the same field of endeavor, teaches another way of using tomographic imaging system for sorting the products. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the inspection system of Richardson et al by the system of Annis et al because they both are used for inspecting and sorting products.

Regarding claims 20 and 28-29, column 2, lines 64-67 and column 7, lines 32-38 of Richardson et al, teach that the mass of the contents of a product is within predetermined limits.

Regarding claim 42, Richardson et al does not explicitly teach the use of a filter. However, it would have been obvious to include in the optical system of Richardson a filter if a certain wavelength or range of wavelengths is selected.

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Regarding claim 43, Richardson et al teaches the use of vacuum source for holding the cartridge which containing powder (column 7, lines 10-40).

Regarding claims 44-45, see figure 2 of Richardson et al.

Regarding claim 48, it would have been obvious to one having ordinary skill in the art to include in the processor a code because this is a known way in the computer processing analysis.

Regarding claim 49, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the light source of Richardson et al by a laser source because they are function in the same manner.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Following references are relative to apparatus for measuring masses of products: Giles (3,629,586), Kowalczynski (3,361,911), Ayers et al (4,223,751), Cornelis (4,519,506), and Christensen et al (5,053,185).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (703) 308-4808. The examiner can normally be reached on 6:30 AM to 5 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Hoa Q. Pham Primary Examiner Art Unit 2877

HP July 21, 2003